



PATENT  
Docket No. 312762001530

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the reissue application of:

Ann MONOSOV et al.

Patent No.: 5,569,812

Issue Date: October 29, 1996

For: NUDE MOUSE MODEL FOR HUMAN  
NEOPLASTIC DISEASE

**SUPPLEMENTAL REISSUE APPLICATION DECLARATION AND POWER OF  
ATTORNEY FOR SIGNATURE BY PERSON WITH SUFFICIENT PROPRIETARY  
INTEREST ON BEHALF OF NONSIGNING INVENTOR(S) WHO REFUSE(S) TO  
SIGN OR CANNOT BE REACHED UNDER 37 C.F.R. § 1.47(B)**

Box 7  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am first and joint inventor of the subject matter that is described and claimed in letters patent number 5,569,812, granted on October 29, 1996, and in the foregoing specification, and for which invention I solicit a reissue patent.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 C.F.R. § 1.56(a) and (b).

**STATEMENT OF INOPERATIVENESS OR INVALIDITY  
OR INVALIDITY OF ORIGINAL PATENT**

That I believe the original patent to be

- ☒ partly  
☐ wholly

inoperative or invalid **because of error without any deceptive intent on the part of the applicant** pursuant to 37 C.F.R. § 1.175(a)(6).

The statement below specifies the errors relied upon, and how they arose pursuant to 37 C.F.R. § 1.175(a)(5).

I believe there is insufficiency in the claims that make the patent inoperative or invalid by reason of the patentee claiming less than he had a right to claim in the patent. (37 C.F.R. § 1.175(a)(3))

**STATEMENT OF INOPERATIVENESS  
OR INVALIDITY OF ORIGINAL PATENT**

Applicants present this Declaration in support of the above-captioned application for reissue of U.S. Patent No. 5,569,812 to correct certain errors in the prosecution of the original patent which are discussed in this Declaration.

1. U.S. Patent No. 5,569,812 ("812 patent") issued on October 29, 1996, from Application No. 459,730, filed on June 2, 1995; which is a continuation of Application No. 169,735, filed on December 17, 1993, which issued on February 13, 1996 as U.S. Patent 5,491,284, which is a continuation of Application No. 719,814, filed on June 24, 1991, now abandoned; which is a continuation-in-part of Application No. 253,990, filed October 5, 1988, now abandoned.

2. The present claims of the '812 patent are drawn to a nude mouse model for human neoplastic disease and to a method of generating a nude mouse model for human neoplastic disease. The composition and method of generating relate to a nude mouse having histologically intact human neoplastic tissue of at least 1 mm<sup>3</sup> in size transplanted onto an organ of said mouse

which corresponds to the human organ from which said tissue is originally obtained; and having sufficient immuno-deficiency to allow said transplanted neoplastic tissue to grow and mimic the progression of the neoplastic disease in the human donor.

3. The attorney of record who filed and prosecuted the applications which subsequently issued as the '812 patent committed an error on his part, apparently without any deceptive intent, by failing to recognize the full breadth and pioneering nature of the present invention and by accepting claims of a narrower scope than that to which Applicant was entitled. These unduly narrowed claims have resulted in the partial inoperativeness or invalidity of the '812 patent by reason of the patentee claiming less than he had a right to claim in the patent. (37 C.F.R. § 1.175(a)(3))

4. These errors in claims 1-12 may be deemed to render the claims as granted wholly or partly invalid and therefore should be corrected.

5. The original claims 1-12 are filed herewith without any modifications or amendments thereto. Also presented are new claims 13-29, which seek to broaden the scope of claims as originally issued. Applicant hereby reserves the right to subsequently amend the claims for the purpose of seeking additional breadth in claim scope as appropriate and necessary.

6. Claims 13, 14, 20, and 21 are drawn to compositions and methods of generating a nude rodent model and specifically in claims 14 and 21, wherein said rodent is a rat. The original specification provides basis for these claims at column 4, lines 9-11, and in view of the disclosure at column 2, line 66 to column 3, line 62.

7. Claims 15-17 and 22-24 are drawn to compositions and methods of generating an immunodeficient rodent model and specifically in claims 16 and 23, wherein said rodent is a rat and specifically in claims 17 and 24, wherein said rodent is a mouse. The original specification provides basis for these claims at column 4, lines 9-11, and in view of the disclosure at column 2, line 66 to column 3, line 62.

8. Claims 18 and 25 are drawn to compositions and methods of generating an immunodeficient rodent model and specifically wherein said rodent is a severe combined immunodeficient (SCID) mouse. The original specification provides basis for these claims at column 4, lines 9-11, and in view of the disclosure at column 2, line 66 to column 3, line 62 and in view of the art at the time of the original filing of the '990 application which recognized that SCID mice were immunodeficient due to a lack of mature T-cells.

9. Claims 19 and 26 are drawn to compositions and methods of generating an immunodeficient non-human mammal model. The original specification provides basis for these claims at column 4, lines 9-11, and in view of the disclosure at column 2, line 66 to column 3, line 62.

10. Claims 27-29 are drawn to compositions of immunodeficient models, wherein is deleted the size limitation of 1 mm<sup>3</sup> relating to the histologically intact human neoplastic tissue that is transplanted onto an organ of said immunodeficient models. This size limitation was included at the close of prosecution in the '730 application, apparently in response to a rejection of the claims under 35 U.S.C. § 112, second paragraph.

### POWER OF ATTORNEY

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Please recognize the following attorneys and agents:

|                                       |   |
|---------------------------------------|---|
| Sanjay Bagade (Reg No. 42,280)        | Erwin J. Basinski (Reg No. 34,773)      |
| Richard R. Batt (Reg No. 43,485)      | Frank P. Becking (Reg No. 42,309)       |
| Kimberly A. Bolin (Reg No. P-44,546)  | Timothy J. Bortree (Reg No. 43,506)     |
| Sean Brennan (Reg No. 39,917)         | Barry E. Bretschneider (Reg No. 28,055) |
| Nicholas Buffinger (Reg No. 39,124)   | Jingming Cai (Reg No. P-44,579)         |
| Alan W. Cannon (Reg No. 34,977)       | Mark R. Carter (Reg No. 39,131)         |
| Robert K. Cerpa (Reg No. 39,933)      | Thomas Chuang (Reg No. P-44,616)        |
| Thomas E. Ciotti (Reg No. 21,013)     | Steven X. Cui (Reg No. P-44,637)        |
| Matthew M. D'Amore (Reg No. 42,457)   | Raj S. Davé (Reg No. 42,465)            |
| Stephen C. Durant (Reg No. 31,506)    | Carolyn A. Favorito (Reg No. 39,183)    |
| Hector Gallegos (Reg No. 40,614)      | Kenneth R. Glick (Reg No. 28,612)       |
| Franklin Y. Han (Reg No. 41,055)      | Douglas Hodder (Reg No. 41,840)         |
| Charles D. Holland (Reg No. 35,196)   | Peter Hsieh (Reg No. P-44,780)          |
| Madeline I. Johnston (Reg No. 36,174) | Richard D. Jordan (Reg No. 33,519)      |
| Ararat Kapouytian (Reg No. 40,044)    | Phanesh B. Koneru (Reg No. 40,053)      |
| Kawai Lau (Reg No. 44,461)            | Susan K. Lehnhardt (Reg No. 33,943)     |
| Richard H. Lilley (Reg No. 42,803)    | David C. Liu (Reg No. P-43,755)         |
| Wen Liu (Reg No. 32,822)              | David C. Lundmark (Reg No. 42,815)      |
| Harry J. Macey (Reg No. 32,818)       | Michael J. Mauriel (Reg No. 44,226)     |
| Thomas D. Mays (Reg No. 34,524)       | Gladys H. Monroy (Reg No. 32,430)       |
| Kate H. Murashige (Reg No. 29,959)    | Catherine M. Polizzi (Reg No. 40,130)   |
| William C. Revelos (Reg No. 42,101)   | Paul J. Riley (Reg No. 38,596)          |
| Robert Saltzberg (Reg No. 36,910)     | Debra A. Shetka (Reg No. 33,309)        |
| Kevin R. Spivak (Reg No. 43,148)      | Suzannah K. Sundby (Reg No. 43,172)     |
| E. Thomas Wheelock (Reg No. 28,825)   | Thomas G. Wiseman (Reg No. 35,046)      |

Karen K. Wong (Reg No. 44,409)

Frank Wu (Reg No. 41,386)

- ☐ Attached as part of this declaration and power of attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative.

all of Morrison & Foerster LLP, 2000 Pennsylvania Avenue, N.W., Washington, D.C. 20006-1888, and 12636 High Bluff Drive, Suite 300, San Diego, California 92130; to prosecute this application and transact all matters in the United States Patent and Trademark Office connected therewith.

Please direct all written communications relative to this application to:

Kate H. Murashige  
Morrison & Foerster LLP  
Suite 5500  
2000 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006-1888

Please direct all telephone communications to Kate H. Murashige (858) 720-5112.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

nonsigning inventor - completed  
on added page

Date

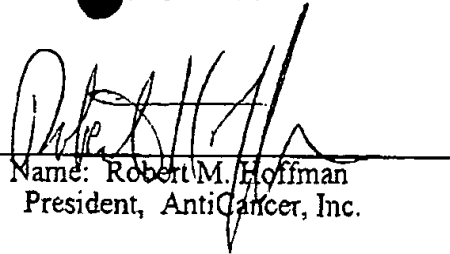
Name: Ann Monosov  
Residence: Encinitas, CA  
Citizenship: United States  
Post Office Address:  
1715 Edgefield Lane  
Encinitas, CA 92024-1977

nonsigning inventor - completed  
on added page

Date

Name: Xinyu Fu  
Residence: La Jolla, CA  
Citizenship: China  
Post Office Address:  
3725 Miramar Street, Apt. C  
La Jolla, CA 92037

1/11/00  
Date

  
Name: Robert M. Hoffman  
President, AntiCancer, Inc.

Residence:

Citizenship: United States  
Post Office Address:  
7917 Ostrow Street  
San Diego, CA 92111



**ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR  
SIGNATURE BY PERSON WITH SUFFICIENT PROPRIETARY INTEREST ON  
BEHALF OF NONSIGNING INVENTOR(S) WHO REFUSE(S) TO SIGN OR CANNOT  
BE REACHED UNDER 37 C.F.R. § 1.47(B)**

I, Robert M. Hoffman, President of Anticancer, Inc. hereby declare that:

I. I am a citizen of US, residing at \*\*\*

II. I

- ☐ am a person with sufficient proprietary interest,  
☒ am authorized by the following person or juristic entity with sufficient proprietary interest,

*(complete the following information, if applicable):*

Anticancer, Inc.

Name of Assignee or entity having such sufficient proprietary interest

7917 Ostrow Street, San Diego, California 92111

Address of Assignee or entity having such sufficient proprietary interest

President, Anticancer, Inc.

Title or person executing this declaration and authorization to sign on behalf of Assignee or entity having such sufficient proprietary interest

III.a. By virtue of this proprietary interest, I sign this declaration on behalf of, and as agent for:  
Full name of (first, second, etc.) Dr. Xinyu Fu  
nonsigning inventor who

- ☐ refuses to sign  
☒ cannot be found or reached

*NOTE: The name of the nonsigning inventor(s) should preferably also be inserted at the appropriate prior space in the declaration, adding the words "nonsigning inventor-completed on added page."*

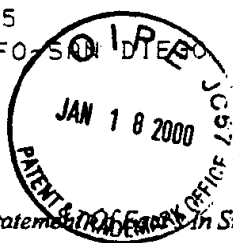
Country of Citizenship of nonsigning inventor

China

Last known address of nonsigning inventor

3725 Miramar Street, Apt. C, La Jolla, California 92037

*NOTE: Ordinarily, the last known address will be the last known residence of the nonsigning inventor(s). A post office box is insufficient. Other addresses at which the nonsigning inventor(s) may be reached should also be given.*



These can best be given in the Statement Of Facts In Support Of Filing On Behalf Of Omitted Inventor. M.P.E.P. § 409.03(e), 6th ed.

III.b. By virtue of this proprietary interest, I sign this declaration on behalf of, and as agent for:  
Full name of (first, second, etc.) Dr. Ann Monosov  
nonsigning inventor who

☒ refuses to sign

☐ cannot be found or reached

NOTE: The name of the nonsigning inventor(s) should preferably also be inserted at the appropriate prior space in the declaration, adding the words "nonsigning inventor-completed on added page."

Country of Citizenship of nonsigning inventor

U.S.

Last known address of nonsigning inventor

1715 Edgefield Lane; Encinitas, CA 92024-1977

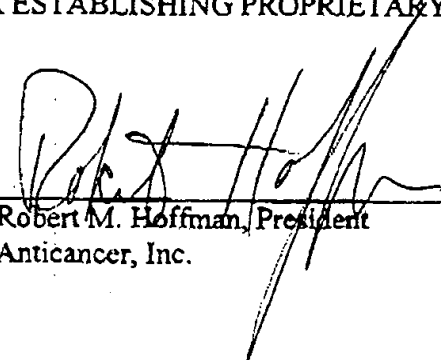
NOTE: Ordinarily, the last known address will be the last known residence of the nonsigning inventor(s). A post office box is insufficient. Other addresses at which the nonsigning inventor(s) may be reached should also be given. These can best be given in the Statement Of Facts In Support Of Filing On Behalf Of Omitted Inventor. M.P.E.P. § 409.03(e), 6th ed.

IV. Upon information and belief, I aver those fact that the inventor is required to state, 37 C.F.R. § 1.64(b).

V. Accompanying this declaration is:

- (1) A STATEMENT OF FACTS IN SUPPORT OF FILING ON BEHALF OF NONSIGNING INVENTOR
- (2) A STATEMENT BY PERSON SIGNING ON BEHALF OF NONSIGNING INVENTOR ESTABLISHING PROPRIETARY INTEREST.

Date: 1/11/00

  
Robert M. Hoffman, President  
Anticancer, Inc.